

REMARKS/ARGUMENTS

This amendment is in response to the final Office Action dated June 22, 2005. Claims 1, 5-9, 11-12, 15-16, and 18-22 have been amended. No new matter has been added by these amendments. Claims 3, 10 and 17 were previously canceled. Therefore, claims 1-2, 3-9, 11-16 and 18-22 are now presented for the Examiner's consideration in view of the following remarks.

Reexamination and reconsideration of the above-identified application, pursuant to and consistent with 37 C.F.R. § 1.116, and in light of the amendments and remarks that follow, are respectfully requested. Because the present claims are believed to be in condition for allowance over the cited art, good cause exists for the entry of this amendment in accordance with 37 C.F.R. § 1.116.

Claims 1, 2, 6, 8-9, 13, 15-16, 20 and 22 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,577,998 ("*Yamamoto*") in view of U.S. Patent No. 6,538,666 ("*Ozawa*"). Applicants respectfully traverse the rejection.

As discussed in the reply to the previous Office Action, *Yamamoto* is directed to an animation system that enables a performer to alter the characteristics of an animated character in response to the performer's voice. (See Abstract.) According to *Yamamoto*, the voice input from the performer is processed by a central processor 144 to determine a set of parameters for animating the character. "In determining the animation, a controller 142 also polls additional input devices such as a control pad 138 and a foot switch 140 [which provide] additional input signals for determining the animation sequence. For example, the additional input signals indicate expressions of the character such as anger, happiness and surprise. In addition, the additional input signals also indicate the orientation of the face with respect to the audience." (Col. 6, Ins. 38-48.) The system includes a voice analyzing unit 12 for analyzing a voice input from the performer "so as to determine a volume parameter, a volume change parameter, a pitch parameter and a pitch change parameter. Upon receiving a trigger signal from an animation generator 15, the voice analyzing unit 12 adjusts the values of the above-described voice parameter set according to a voice parameter profile 16, which includes adjustment values for adjusting a predetermined characteristic of the voice input." (Col. 7, Ins. 15-22.)

Once the basic frequency of an input voice signal is determined, "the basic frequency value is placed in a frequency parameter. In addition, the frequency value is compared to the last determined frequency value to determine a difference in frequency value between the current and the last input signal. The above difference value is placed in a frequency change parameter. Lastly, the last frequency value is updated by the current frequency value." (Col. 9, ll. 41-48, emphasis added; see also FIG. 9, step S26.) With respect to a volume change, a "volume value is placed in a volume parameter and is compared to a previous volume value to determine a difference in volume value between the current and the last volume signals. After the difference is determined, the difference value is placed in a volume change parameter, and the last volume parameter is updated by the current volume value." (Col. 9, ll. 53-59, emphasis added; see also FIG. 10, step S34.)

After the voice parameters are generated, "the system generally generates an animation sequence for animating a character according to the voice input from a step S40. To realistically animate the character, in steps S42 and S44, the currently generated voice parameter is compared to the last stored voice parameter so as to determine a context sensitive factor for the animation. In other words, for example, if the mouth is already open as indicated in the last voice parameter and the current voice parameter indicates no input voice. The next animation sequence frames should include the closing movements for the mouth." (Col. 10, ll. 18-30, emphasis added.)

Thus, it is clear that the voice parameters (e.g., volume parameter, volume change parameter, pitch parameter, and pitch change parameter) are based on current and previous information obtained from the user/performer. In particular, the "change" parameters of *Yamamoto* are determined by taking the difference between current and last signals.

As stated in the previous amendment, "The evaluation reference voice data required by the independent claims is prepared/stored in advance, and is not voice information from the player." (3/18/05 Amendment, pg. 12, emphasis added.) The independent claims of the instant application have been amended to further clarify this difference from the cited art, in particular with regard to the evaluation reference voice data not being voice data from the user.

For example, claim 1 now includes "storing reference voice data in advance as an evaluation reference for the relative sound interval and the sound volume of the voice to be inputted by the player, the reference voice data being data other than data included in the voice from the player." Claim 8 now recites "the reference voice data being prepared in advance as data other than the voice data input from the player and including an evaluation reference for the relative sound interval and the sound volume of the voice data to be inputted by the player." Claim 15 currently recites "store reference voice data prepared in advance as data other than data included in the voice input from the player, the reference voice data including an evaluation reference for the relative sound interval and the sound volume of the voice to be inputted by the player." Claim 22 now recites "periodic comparison of the extracted information of the relative sound interval and the extracted information of the sound volume with reference voice data other than data included in the voice input from the player, the reference voice data being prepared in advance and including an evaluation reference for the relative sound interval and the sound volume of the voice to be received through the voice input device."

The reference voice data and the use of such data required by the independent claims is neither disclosed nor suggested by *Yamamoto*, for example because *Yamamoto* merely compares current and previously stored voice parameters from a user, and does not employ reference voice data different from the voice parameters of the user. The deficiencies of *Yamamoto* are not remedied by *Ozawa*, which was discussed in the previous amendment, or the other art of record.

There is also no teaching, suggestion or motivation to modify *Yamamoto* to replace previously stored voice parameters from the user with reference voice data that is different from the user's voice parameters. *Yamamoto* is tailored to generate an animation sequence for a character as part of a real-time presentation and authoring tool system, and it does not appear feasible to modify *Yamamoto* to operate in a manner as required by the claims of the instant application.

Therefore, for at least these reasons, applicants respectfully request that the rejection of independent claims 1, 8, 15 and 22 be withdrawn. Dependent claims 2, 6, 8-9, 13, 15-16 and 20 depend from independent claims 1, 8, and 15, respectively, and contain all the limitations thereof as well as other limitations which are neither

disclosed nor suggested by the art of record. Accordingly, applicants submit that the subject dependent claims are likewise patentable.

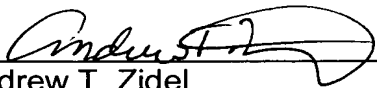
Claims 4, 11 and 18 were rejected under 35 U.S.C. § 103(a) as being obvious over *Yamamoto* in view of *Ozawa* and U.S. Patent No. 6,748,361 ("*Comerford*"). Claims 5, 7, 12, 14, 19 and 21 were rejected under 35 U.S.C. § 103(a) as being obvious over *Yamamoto* in view of *Ozawa* and U.S. Patent No. 6,766,299 ("*Bellomo*"). Claims 4-5, 7, 11-12, 14, 18-19 and 21 depend from independent claims 1, 8, and 15, respectively, and contain all the limitations thereof as well as other limitations which are neither disclosed nor suggested by the art of record. Accordingly, for at least the reasons stated above, applicants submit that these dependent claims are likewise patentable.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone applicants' attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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Respectfully submitted,

By 
Andrew T. Zidel

Registration No.: 45,256
LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK, LLP
600 South Avenue West
Westfield, New Jersey 07090
(908) 654-5000
Attorney for Applicant